

Table 4-29. Comparison of safety system alternatives (primarily confinement/containment options)

System	Technical feasibility	Estimated costs (\$MM) ^a			Benefit person-rem averted ^d (3% melt)	Cost/benefit ^e (\$ per person-rem averted)	Timing (months to complete)
		Capital ^b	Production Loss ^c	Total			
Existing confinement (ref) system	Demonstrated and proven	Installed	None	Installed	--	Reference	Installed
Remote storage system	Demonstrated	250	25	275	445	620,000	24
Low temperature adsorption system	Not demonstrated	90	50	140	460	300,000	36
Tall stack	Demonstrated	50	15	65	175	370,000	15
Internal containment	Questionable	250	150	400	455	880,000	48
Leaktight dome	Questionable	850	50	900	450	2,000,000	36

^aMM - millions of dollars.

^bRough estimates escalated to 3Q FY 1988 construction midpoint.

^cRough cost of production lost during construction at \$150,000 per reactor-day.

^dAssumes hypothetical accident (3-percent melt) occurs. Dose within 80-kilometer radius from reactor (2500 megawatts accident). 50 percent meteorology. Benefit = (dose with existing confinement system - dose with alternative system) = person-rem averted.

^eThe expected cost benefit considering the probability of the accident is at least two million times greater than the values listed here.